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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,950	03/08/2002	James S. Schutzbach	215185.00101	7361

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EXAMINER

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,950

Applicant(s)

SCHUTZBACH ET AL.

Examiner

Michael P Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-38 is/are allowed.
- 6) ☒ Claim(s) 1-12 and 39-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Amendment filed on January 13, 2004 has been acknowledged.

Drawings

1. New corrected drawings are required in this application to incorporate new Fig. 5a. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

2. Claim 39 is objected to because of the following informalities:
- after "storage medium" (line 1) should replace "for storing" with – comprising --.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-12, 39, 40, and 42-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Stevens (US 5,942,698).

Stevens discloses all the claimed features of the invention including:

- a method and system for monitoring and analyzing flow in a sewer system (Fig. 7), comprising:

- collecting, using a monitoring assembly (Fig. 7), data representative of actual flow volume in a first location (column 2, lines 41-44);

- storing the data representative of actual flow volume in a memory (plotted data are stored in 60, Fig. 7);

- maintaining, in the memory, previously stored data representative of previous flow volumes (column 4, lines 34-39);

- determining a predicted flow volume, wherein the predicted flow volume is

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dependent upon data selected from the previously stored data and a day and time (column 3, lines 39-50), wherein the day and time each correspond to both the data selected from the previously stored data and the data representative of actual flow volume (column 4, lines 32-55);

- comparing the actual flow volume with the predicted flow volume to yield a difference value (column 1, lines 32-39);

- the difference value exceeds a predetermined variance value, and the method further comprises the step of issuing a flow loss notification (overflow alarm at one location, Abstract, lines 7-9, indicates a flow blockage at another (column 2, lines 57-61);

- the difference value is equal to or less than a predetermined variance value, and the method further comprises storing the actual flow volume in the memory as stored calibration data (normal flow data 38, 40, Fig. 5);

- collecting data representative of actual flow volume includes the steps of collecting data representative of flow velocity and data representative of depth (via 16);

- calculating the data representative of actual flow volume using the data representative of flow velocity and the data representative of depth (via 60, 62, column 4, lines 34-46), and the method further comprising the step of transmitting at least one of the data representative of flow velocity, data representative of depth, and data representative of actual flow volume over a data network to a computing device (data from 16 to 60, 62, Fig. 7);

- the data representative of actual flow volume includes data representative of a rolling average flow volume (flow meter 16 reads "averaged out" flow data);
- the data representative of actual flow volume includes at least one of flow velocity data and depth data (column 2, lines 42-44);
- at least one of the determining step and the comparing step is performed by the monitoring assembly (via 64, 66, Fig. 7);
- at least one of the determining step and the comparing step is performed by a computing device (64, 66);
- validating the data representative of flow velocity and the data representative of depth (column 4, lines 50-55);
- the validating step is performed by the monitoring assembly (62, Fig. 7);
- the predicted flow volume is further dependent upon additional data selected from the previously stored data, the additional data corresponding to a rain event (column 1, lines 9-10).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 3 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens.

Stevens further discloses that the flow monitoring is provided to indicate abnormal conditions at locations remote from the location of the flow detector (column 2, lines 1-3).

Therefore, even though Stevens does not disclose communicating the flow loss notification by at least one of a cellular telephone means, a land line telephone means, a pager, an electronic mail means, and an Internet means, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to communicate via the Internet for the purpose of reaching a remote area.

Allowable Subject Matter

5. Claims 13-38 are allowed.

Reasons For Allowance

6. The combination as claimed wherein the predicted flow volume being dependent upon the data stored in the memory and the stored detection time

associated with said data (claims 13, 26) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

7. Applicant's arguments filed on January 13, 2004 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 rejections, Applicants argue that Stevens does not disclose that the predicted flow volume is dependent upon the day and the time. Examiner's position is that Stevens discloses that the predicted flow volume (scattergraph pattern 32, Fig. 4) is dependent upon data selected from the previously stored data and a day and time (data are stored into a pattern at selected time intervals, column 4, lines 34-39), wherein the day and time each correspond to both the data selected from the previously stored data and the data representative of actual flow volume (data, previously stored or present, are produced at corresponding time intervals, column 4, lines 40-43).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2272. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (571) 272-2269. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

0956.


MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

February 24, 2004